

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/S35, 764
Source: PCT
Date Processed by STIC: 6/1/05

ENTERED

BEST AVAILABLE COPY



PCT

RAW SEQUENCE LISTING

DATE: 06/01/2005

PATENT APPLICATION: US/10/535,764

TIME: 16:24:01

Input Set : A:\14875-0144US1.txt

Output Set: N:\CRF4\06012005\J535764.raw

```

3 <110> APPLICANT: Tsuchiya, Masayuki
4     Suzuki, Masami
5     Yoshida, Kenji
6     Fujii, Etsuko
7     Matsubara, Kouichi
8     Tsunoda, Hiroyuki
10 <120> TITLE OF INVENTION: ANTIBODIES AGAINST LESIONAL TISSUES
12 <130> FILE REFERENCE: 14875-144US1
C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/535,764
C--> 14 <141> CURRENT FILING DATE: 2005-05-20
14 <150> PRIOR APPLICATION NUMBER: PCT/JP2003/014919
15 <151> PRIOR FILING DATE: 2003-11-21
17 <150> PRIOR APPLICATION NUMBER: JP 2002-339241
18 <151> PRIOR FILING DATE: 2002-11-22
20 <160> NUMBER OF SEQ ID NOS: 188
22 <170> SOFTWARE: PatentIn version 3.1
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 360
26 <212> TYPE: DNA
27 <213> ORGANISM: Homo sapiens
29 <220> FEATURE:
30 <221> NAME/KEY: CDS
31 <222> LOCATION: (1)..(360)
32 <223> OTHER INFORMATION:
W--> 34 <400> 1
35  cag gtg cag ctg gtg caa tct ggg gct gag gtg aag aag cct ggg gcc      48
36  Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
37  1          5          10          15
39  tca gtg aag gtc tcc tgt cag gct tct gga tac atg ttc acc ggc ttc      96
40  Ser Val Lys Val Ser Cys Gln Ala Ser Gly Tyr Met Phe Thr Gly Phe
41  20          25          30
43  tat atg cac tgg gtg cga cag gcc cct gga caa ggg ctt gag tgg atg      144
44  Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
45  35          40          45
47  gga tgg atg aac act aac agt ggt gcc aca ggc tat gca cac aag ttt      192
48  Gly Trp Met Asn Thr Asn Ser Gly Ala Thr Gly Tyr Ala His Lys Phe
49  50          55          60
51  cag gac agg gtc acc ctg acc agg gac acg tcc atc agc aca ggc tac      240
52  Gln Asp Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Gly Tyr
53  65          70          75          80
55  atg gag ctg ggc ggc ctg aca tct gac gac acg gcc gtg tat tat tgt      288
56  Met Glu Leu Gly Gly Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys
57  85          90          95

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/535,764

DATE: 06/01/2005

TIME: 16:24:01

Input Set : A:\14875-0144US1.txt

Output Set: N:\CRF4\06012005\J535764.raw

```

59 gcg aga acc cag gag gtt tac tac tac gct atg gac gtc tgg ggc caa      336
60 Ala Arg Thr Gln Glu Val Tyr Tyr Tyr Ala Met Asp Val Trp Gly Gln
61      100      105      110
63 ggg cca atg gtc acc gtc tct tca      360
64 Gly Pro Met Val Thr Val Ser Ser
65      115      120
68 <210> SEQ ID NO: 2
69 <211> LENGTH: 120
70 <212> TYPE: PRT
71 <213> ORGANISM: Homo sapiens
73 <400> SEQUENCE: 2
74 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
75 1      5      10      15
77 Ser Val Lys Val Ser Cys Gln Ala Ser Gly Tyr Met Phe Thr Gly Phe
78      20      25      30
80 Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
81      35      40      45
83 Gly Trp Met Asn Thr Asn Ser Gly Ala Thr Gly Tyr Ala His Lys Phe
84      50      55      60
86 Gln Asp Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Gly Tyr
87 65      70      75      80
89 Met Glu Leu Gly Gly Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys
90      85      90      95
92 Ala Arg Thr Gln Glu Val Tyr Tyr Tyr Ala Met Asp Val Trp Gly Gln
93      100      105      110
95 Gly Pro Met Val Thr Val Ser Ser
96      115      120
99 <210> SEQ ID NO: 3
100 <211> LENGTH: 366
101 <212> TYPE: DNA
102 <213> ORGANISM: Homo sapiens
104 <220> FEATURE:
105 <221> NAME/KEY: CDS
106 <222> LOCATION: (1)..(366)
107 <223> OTHER INFORMATION:
W--> 109 <400> 3
110 cag gtc cag ctg gtg caa tct gga gga ggc gtg gtc cag cct ggg agg      48
111 Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg
112 1      5      10      15
114 tcc ctg aga ctc tcc tgt gca gcc tct gga ttc acc ttc agt agc aat      96
115 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Asn
116      20      25      30
118 ggc atg cac tgg gtc cgc cag gct cca ggc aag ggg ctg gag tgg gtg      144
119 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
120      35      40      45
122 gca gtt ata tgg tat gat gga agt aat aaa tac tat gca gac tcc gtg      192
123 Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
124      50      55      60
126 aag ggc cga ttc acc atc tcc aga gac aat tcc aag aac aca ctg tat      240

```

RAW SEQUENCE LISTING

DATE: 06/01/2005

PATENT APPLICATION: US/10/535,764

TIME: 16:24:01

Input Set : A:\14875-0144US1.txt

Output Set: N:\CRF4\06012005\J535764.raw

```

127 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
128 65          70          75          80
130 ctg caa atg aac agc ctg aga gcc gag gac acg gct gtg tat tac tgt      288
131 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
132          85          90          95
134 gcg aga gat cac ggc ctt ggt gat caa gcc tcc tgg ttc gac ccc tgg      336
135 Ala Arg Asp His Gly Leu Gly Asp Gln Ala Ser Trp Phe Asp Pro Trp
136          100          105          110
138 ggc cag gga acc ctg gtc acc gtc tcc tca      366
139 Gly Gln Gly Thr Leu Val Thr Val Ser Ser
140          115          120
143 <210> SEQ ID NO: 4
144 <211> LENGTH: 122
145 <212> TYPE: PRT
146 <213> ORGANISM: Homo sapiens
148 <400> SEQUENCE: 4
149 Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg
150 1          5          10          15
152 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Asn
153          20          25          30
155 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
156          35          40          45
158 Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
159          50          55          60
161 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
162 65          70          75          80
164 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
165          85          90          95
167 Ala Arg Asp His Gly Leu Gly Asp Gln Ala Ser Trp Phe Asp Pro Trp
168          100          105          110
170 Gly Gln Gly Thr Leu Val Thr Val Ser Ser
171          115          120
174 <210> SEQ ID NO: 5
175 <211> LENGTH: 366
176 <212> TYPE: DNA
177 <213> ORGANISM: Homo sapiens
179 <220> FEATURE:
180 <221> NAME/KEY: CDS
181 <222> LOCATION: (1)..(366)
182 <223> OTHER INFORMATION:
W--> 184 <400> 5
185 cag gtc cag ctg gtg caa tct ggg gga ggc gtg gtc cag cct ggg agg      48
186 Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg
187 1          5          10          15
189 tcc ctg aga ctc tcc tgt gca gcc tct gga ttc acc ttc agt agc aat      96
190 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Asn
191          20          25          30
193 ggc atg cac tgg gtc cgc cag gct cca ggc aag ggg ctg gag tgg gtg      144
194 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

```

RAW SEQUENCE LISTING

DATE: 06/01/2005

PATENT APPLICATION: US/10/535,764

TIME: 16:24:01

Input Set : A:\14875-0144US1.txt

Output Set: N:\CRF4\06012005\J535764.raw

```

195          35          40          45
197 gca gtt ata tgg tat gat gga agt aat aaa tac tat gca gac tcc gtg      192
198 Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
199          50          55          60
201 aag ggc cga ttc acc atc tcc aga gac aat tcc aag aac aca ctg tat      240
202 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
203 65          70          75          80
205 ctg caa atg aac agc ctg aga gcc gag gac acg gct gtg tat tac tgt      288
206 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
207          85          90          95
209 gcg aga gat cac ggc ctt ggt gat caa gcc tcc tgg ttc gac ccc tgg      336
210 Ala Arg Asp His Gly Leu Gly Asp Gln Ala Ser Trp Phe Asp Pro Trp
211          100          105          110
213 ggc cag gga acc ctg gtc acc gtc tcc tca      366
214 Gly Gln Gly Thr Leu Val Thr Val Ser Ser
215          115          120
218 <210> SEQ ID NO: 6
219 <211> LENGTH: 122
220 <212> TYPE: PRT
221 <213> ORGANISM: Homo sapiens
223 <400> SEQUENCE: 6
224 Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg
225 1          5          10          15
227 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Asn
228          20          25          30
230 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
231          35          40          45
233 Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
234          50          55          60
236 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
237 65          70          75          80
239 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
240          85          90          95
242 Ala Arg Asp His Gly Leu Gly Asp Gln Ala Ser Trp Phe Asp Pro Trp
243          100          105          110
245 Gly Gln Gly Thr Leu Val Thr Val Ser Ser
246          115          120
249 <210> SEQ ID NO: 7
250 <211> LENGTH: 340
251 <212> TYPE: DNA
252 <213> ORGANISM: Homo sapiens
254 <220> FEATURE:
255 <221> NAME/KEY: CDS
256 <222> LOCATION: (1)..(339)
257 <223> OTHER INFORMATION:
W--> 259 <400> 7
260 cag gtg cag ctg gtg caa tct ggg gct gag gtg agg aag cct ggg acg      48
261 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Arg Lys Pro Gly Thr
262 1          5          10          15

```

RAW SEQUENCE LISTING

DATE: 06/01/2005

PATENT APPLICATION: US/10/535,764

TIME: 16:24:01

Input Set : A:\14875-0144US1.txt

Output Set: N:\CRF4\06012005\J535764.raw

```

264 aca gtg aca atc tcc tgc aag gtt tct gga cac aac ttc atc gac cac      96
265 Thr Val Thr Ile Ser Cys Lys Val Ser Gly His Asn Phe Ile Asp His
266          20          25          30
268 tac atg cat tgg gta caa cag gcc cct gga aaa ggg ctt gac tgg atg      144
269 Tyr Met His Trp Val Gln Gln Ala Pro Gly Lys Gly Leu Asp Trp Met
270          35          40          45
272 gga cta att gac cct gaa gat ggt cag acg aaa tat tca gag agg ttt      192
273 Gly Leu Ile Asp Pro Glu Asp Gly Gln Thr Lys Tyr Ser Glu Arg Phe
274          50          55          60
276 gag ggc aga gtc aca att acc gcg gac aag tca aca gac aca acc tac      240
277 Glu Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Asp Thr Thr Tyr
278 65          70          75          80
280 ttg gag gtg agc ggc ctg aga tcg gaa gac acg gcc gtt tat ttc tgt      288
281 Leu Glu Val Ser Gly Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys
282          85          90          95
284 aca acg gac ttg ggt gac ttg aat tat tgg aac cct ggt cac cgt ctc      336
285 Thr Thr Asp Leu Gly Asp Leu Asn Tyr Trp Asn Pro Gly His Arg Leu
286          100          105          110
288 ctc a      340
289 Leu
293 <210> SEQ ID NO: 8
294 <211> LENGTH: 113
295 <212> TYPE: PRT
296 <213> ORGANISM: Homo sapiens
298 <400> SEQUENCE: 8
299 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Arg Lys Pro Gly Thr
300 1          5          10          15
302 Thr Val Thr Ile Ser Cys Lys Val Ser Gly His Asn Phe Ile Asp His
303          20          25          30
305 Tyr Met His Trp Val Gln Gln Ala Pro Gly Lys Gly Leu Asp Trp Met
306          35          40          45
308 Gly Leu Ile Asp Pro Glu Asp Gly Gln Thr Lys Tyr Ser Glu Arg Phe
309          50          55          60
311 Glu Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Asp Thr Thr Tyr
312 65          70          75          80
314 Leu Glu Val Ser Gly Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys
315          85          90          95
317 Thr Thr Asp Leu Gly Asp Leu Asn Tyr Trp Asn Pro Gly His Arg Leu
318          100          105          110
320 Leu
324 <210> SEQ ID NO: 9
325 <211> LENGTH: 366
326 <212> TYPE: DNA
327 <213> ORGANISM: Homo sapiens
329 <220> FEATURE:
330 <221> NAME/KEY: CDS
331 <222> LOCATION: (1)..(366)
332 <223> OTHER INFORMATION:
W--> 334 <400> 9

```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 06/01/2005
PATENT APPLICATION: US/10/535,764 TIME: 16:24:02

Input Set : A:\14875-0144US1.txt
Output Set: N:\CRF4\06012005\J535764.raw

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:97,98,99,100,101,102,103,104,105,106,107,108,109,110,111,112,113,114,115
Seq#:116,117,118,119,120,121,122,123,124,125,126,127,128,129,130,131,132,133
Seq#:134,135,136,137,138,139,140,141,142,143,144,145,146,147,148,149,150,151
Seq#:152,153,154,155,156,157,158,159,160,161,162,163,164,165,166,167,168,169
Seq#:170,171,172,173,174,175,176,177,178,179,180,181,182

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/535,764

DATE: 06/01/2005

TIME: 16:24:02

Input Set : A:\14875-0144US1.txt

Output Set: N:\CRF4\06012005\J535764.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application No
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:34 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:1,Line#:32
L:109 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:3,Line#:107
L:184 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:5,Line#:182
L:259 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:7,Line#:257
L:334 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:9,Line#:332
L:409 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:11,Line#:407
L:484 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:13,Line#:482
L:559 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:15,Line#:557
L:634 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:17,Line#:632
L:709 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:19,Line#:707
L:784 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:21,Line#:782
L:859 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:23,Line#:857
L:934 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:25,Line#:932
L:1009 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:27,Line#:1007
L:1084 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:29,Line#:1082
L:1159 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:31,Line#:1157
L:1234 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:33,Line#:1232
L:1309 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:35,Line#:1307
L:1384 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:37,Line#:1382
L:1459 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:39,Line#:1457
L:1534 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:41,Line#:1532
L:1609 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:43,Line#:1607
L:1684 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:45,Line#:1682
L:1759 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:47,Line#:1757
L:1834 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:49,Line#:1832
L:1909 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:51,Line#:1907
L:1984 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:53,Line#:1982
L:2059 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:55,Line#:2057
L:2134 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:57,Line#:2132
L:2202 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:59,Line#:2200
L:2277 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:61,Line#:2275
L:2352 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:63,Line#:2350
L:2427 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:65,Line#:2425
L:2502 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:67,Line#:2500
L:2577 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:69,Line#:2575
L:2652 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:71,Line#:2650
L:2727 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:73,Line#:2725
L:2802 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:75,Line#:2800
L:2877 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:77,Line#:2875
L:2952 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:79,Line#:2950
L:3027 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:81,Line#:3025
L:3102 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:83,Line#:3100
L:3177 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:85,Line#:3175
L:3252 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:87,Line#:3250
L:3320 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:89,Line#:3318
L:3388 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:91,Line#:3386

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/535,764

DATE: 06/01/2005

TIME: 16:24:02

Input Set : A:\14875-0144US1.txt

Output Set: N:\CRF4\06012005\J535764.raw

L:3463 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:93,Line#:3461
L:3538 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:95,Line#:3536
L:4647 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:183,Line#:4645
L:4792 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:185,Line#:4790